



Paint and other coatings can be removed in a material-friendly manner

#### > Fields of application:

- Power plants and waste incineration plants
- Steelworks and foundries
- Timber-processing industry
- Baking and food industry
- Electrical industry
- Packaging industry
- Plastics industry
- Automotive industry
- Tire industry

Can we help you?  
Feel free to contact us!

© 2023, BUCHEN EnergyServices GmbH

**BUCHEN®**  
WORKING FOR THE FUTURE

BUCHEN is part of the REMONDIS group, one of the world's largest recycling, service and water companies. The company group has branches and associated businesses in more than 30 countries across Europe, Africa, Asia and Australia. With over 40,000 employees, the group serves around 30 million people as well as many thousands of companies. The highest levels of quality. Working for the future.

**BUCHEN EnergyServices GmbH**  
Schloßstr. 36  
44653 Herne // Germany  
T +49 2325 3729-0  
F +49 2325 3729-219  
vertrieb.bes@buchen.net  
buchen-energyservices.com  
A company of the REMONDIS Group

**BUCHEN®**  
WORKING FOR THE FUTURE

## Ice pellet blasting method



#### > BUCHEN EnergyServices GmbH

Specialist for industrial services for conventional power plants and incineration plants

buchen-energyservices.com

## Dry-ice blasting

The ice pellet blasting method is an environmentally and material-friendly method for the surface preparation and cleaning. It is ideally suited for the removal of fouling from metal parts and surfaces.

With this cleaning method, dry-ice pellets made of frozen carbon dioxide (-79 °C) are accelerated to a high speed, and shot towards the surface to be cleaned. For certain fire damages, it is possible to perform the initial cleaning operations in a gentle manner with the help of our ice pellet blasting method. So far, the method has proven to be successful after fire incidents in electrical equipment or distributing cabinets of communication systems! The method induces a "thermal shock" since the surface is



The dry-ice blasting method offers a reasonable and financially interesting alternative to conventional cleaning methods, such as water high-pressure cleaning or sandblasting

instantaneously cooled, which causes the coating and fouling to contract. As a result of this sudden volume reduction, cracks are formed and the material becomes brittle.

Since the ice pellets hit the material at high velocities, the cracked deposits are removed from the surface. Upon impact, the volume of the dry ice increases by a factor of 700 and changes it immediately from solid to gaseous state of aggregation (sublimation).

### Application areas: For the cleaning of

- Tools and equipment
- Motors, generators and turbines
- Moulds, containers and vessels
- Conveyor pulleys and belts
- Crowns, driers and ventilation units
- Hot moulds and tiles
- Filling, production and mixing plants
- Fire damage restoration
- Switchgear systems and insulators
- as well as the removal of
- Tinder and slags
- Coal and grease residues

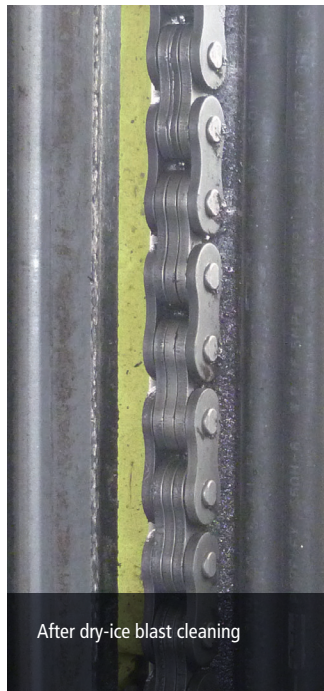
The cleaning effect of the dry-ice blasting method is based on the thermal and kinetic energy of the pellets, by which the fouling is brittle and loosened. The sudden change of the physical condition of the blast material re-moves fouling from the surface.

### > Your advantages at a glance

- No blast agent residues
- Gentle to surface - non-abrasive
- No assembly/disassembly required
- Higher degree of occupational and fire safety
- Cleaning of moisture/water-sensitive systems is possible
- Environmentally friendly
- No release of harmful gases
- No generation of secondary waste
- Safe and non-toxic



Chain links clogged with oil and grease



After dry-ice blast cleaning